

PATENT COOPERATION TREATY

CC

From the INTERNATIONAL SEARCHING AUTHORITY

To:
ROBERT M. BAUER
BROWN RAYSMAN MILLSTEIN FELDER & STEINER LLP
900 THIRD AVENUE
NEW YORK, NY 10022

PCT

NOTIFICATION OF TRANSMITTAL OF
THE INTERNATIONAL SEARCH REPORT AND
THE WRITTEN OPINION OF THE INTERNATIONAL
SEARCHING AUTHORITY, OR THE DECLARATION

(PCT Rule 44.1)

Applicant's or agent's file reference 4652/14WO	Date of mailing (day/month/year) 04 MAR 2005 FOR FURTHER ACTION See paragraphs 1 and 4 below
International application No. PCT/US04/22424	International filing date (day/month/year) 13 July 2004 (13.07.2004)
Applicant MARKET AXESS, INC.	

1. ☒ The applicant is hereby notified that the international search report and the written opinion of the International Searching Authority have been established and are transmitted herewith.
- Filing of amendments and statement under Article 19:**
The applicant is entitled, if he so wishes, to amend the claims of the international application (see Rule 46):
- When?** The time limit for filing such amendments is normally two months from the date of transmittal of the international search report.

Where? Directly to the International Bureau of WIPO, 34 chemin des Colombettes
1211 Geneva 20, Switzerland, Facsimile No.: +41 22 740 14 35

For more detailed instructions, see the notes on the accompanying sheet.

2. ☐ The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect and the written opinion of the International Searching Authority are transmitted herewith.
3. ☐ With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:
- ☐ the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.
- ☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. **Reminders**

Shortly after the expiration of **18 months** from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90bis.1 and 90bis.3, respectively, before the completion of the technical preparations for international publication.

The applicant may submit comments on an informal basis on the written opinion of the International Searching Authority to the International Bureau. The International Bureau will send a copy of such comments to all designated Offices unless an international preliminary examination report has been or is to be established. These comments would also be made available to the public but not before the expiration of 30 months from the priority date.

Within **19 months** from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase **until 30 months** from the priority date (in some Offices even later); otherwise, the applicant must, **within 20 months** from the priority date, perform the prescribed acts for entry into the national phase before those designated Offices.

In respect of other designated Offices, the time limit of **30 months** (or later) will apply even if no demand is filed within 19 months.

See the Annex to Form PCT/IB/301 and, for details about the applicable time limits, Office by Office, see the *PCT Applicant's Guide*, Volume II, National Chapters and the WIPO Internet site.

Name and mailing address of the ISA/ US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230	Authorized officer Vincent Tran Telephone No. 571-272-3613
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Form PCT/ISA/220 (January 2004)

(See notes on accompanying sheet)

PATENT COOPERATION TREATY

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INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 4652/14WO	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/US04/22424	International filing date (<i>day/month/year</i>) 13 July 2004 (13.07.2004)	(Earliest) Priority Date (<i>day/month/year</i>) 31 July 2003 (31.07.2003)
Applicant MARKET AXESS, INC.		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 2 sheets.

It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the Report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

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☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

☐

2. ☐ Certain claims were found unsearchable (See Box No. II)

1

3. ☐ **Unity of invention is lacking (See Box No. III)**

With

4. With regard to the title,



the text is approved as submitted by the applicant.

☐

the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☒

the text is approved as submitted by the applicant.

1

the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the drawings,

- a. the figure of the **drawings** to be published with the abstract is Figure No. 4

☒

as suggested by the applicant.

7

as selected by this Authority, because the applicant failed to suggest a figure.

9

as selected by this Authority, because this figure better characterizes the invention.

- b. ☐ none of the figures is to be published with the abstract.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/22424

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G06F 17/60

US CL : 705/37

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 705/26, 27, 35-37, 42, 80

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2002/0099645 (AGARWAL et al) 25 July 2002; entire document	1-31
A	US 6,058,379 (ODOM et al) 2 May 2000; entire document	1-31
A	US 6,035,287 (STALLAERT et al) 07 March 2000; entire document	1-31

☐

Further documents are listed in the continuation of Box C.

☐

See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T"

later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X"

document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y"

document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&"

document member of the same patent family

Date of the actual completion of the international search

19 February 2005 (19.02.2005)

Date of mailing of the international search report

04 MAR 2005

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (703) 305-3230

Authorized officer

Vincent Trans

Telephone No. 571-272-3613

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US04/22424

CC

Continuation of B. FIELDS SEARCHED Item 3:

USPGPUB

search terms: benchmark, bargain, trades, exchange, auction, barter, spread

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INTERNATIONAL SEARCHING AUTHORITY

To:
ROBERT M. BAUER
BROWN RAYSMAN MILLSTEIN FELDER & STEINER LLP
900 THIRD AVENUE
NEW YORK, NY 10022

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WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Applicant's or agent's file reference 4652/14WO		Date of mailing (day/month/year) 04 MAR 2005 FOR FURTHER ACTION See paragraph 2 below
International application No. PCT/US04/22424	International filing date (day/month/year) 13 July 2004 (13.07.2004)	Priority date (day/month/year) 31 July 2003 (31.07.2003)
International Patent Classification (IPC) or both national classification and IPC IPC(7): G06F 17/60 and US Cl.: 705/26, 27, 35-37, 42, 80		
Applicant MARKET AXESS, INC.		

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/ US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230	Authorized officer Vincent Tran Telephone No. 571-272-3613
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Form PCT/ISA/237 (cover sheet) (January 2004)

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/US04/22424

CC

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).

2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

☐ a sequence listing

☐ table(s) related to the sequence listing

b. format of material

☐ in written format

☐ in computer readable form

c. time of filing/furnishing

☐ contained in international application as filed.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

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CC

Box No. V Reasoned statement under Rule 43 *bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims <u>NONE</u>	YES
	Claims <u>1-31</u>	NO
Inventive step (IS)	Claims <u>NONE</u>	YES
	Claims <u>1-31</u>	NO
Industrial applicability (IA)	Claims <u>1-31</u>	YES
	Claims <u>NONE</u>	NO

2. Citations and explanations:

Please See Continuation Sheet

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/US04/22424

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

V. 2. Citations and Explanations:

Claims 1-31 lack novelty under PCT Article 33(2) as being anticipated by the Agarwal et al. patent application (US 2002/0099645).

The Agarwal reference discloses a method implemented by a computer system for trading, buying or selling, of lists of independent items at independent quantities between an initiator and multiple respondents, said method comprising:

Providing a list creation state to enable the initiator to enter, through a user interface, a list of items of buying or selling interest with select volumes ([0103]),

Providing, a list response state to enable list-recipient respondents to enter, through a user interface, offers or bids on a single item, multiple items, or all items on the list, on an item-by-item basis at independent spreads, yields, discount margins or prices in the volume requested ([0131]),

Providing a list trade state to enable the initiator to view and trade on (by hitting or lifting), through said user interface, on a single item, multiple items, or all items on the list, on an item-by-item basis at independent and select spreads, yields, discount margins or prices for each item where a response(s) was received ([0126]),

Providing a list pricing state to enable the initiator to request from the respondent, via a user interface, a final price for each traded security when either:

Spread to benchmark and benchmark spot price and benchmark spot yield have already agreed ([0142]),

For securities that trade on yield or discount margin, any other method that does not require a benchmark spotting phase ([0142]), and

Providing a list complete state to notify the initiator and respondents that each item on the list have reached a final state in which the item was traded or not traded ([0144]) (Claim 1);

The investor may set a plurality of parameters on the inquiry list, said parameters including the time of day that the responses are due back to the initiator ([0134]) (claim 2);

The investor may set a plurality of parameters on the inquiry list, said parameters including the duration of time that the responses, once released, are to be actionable by the list initiator ([0139]) (Claim 3);

The investor may set a plurality of parameters on the inquiry list, said parameters including the list type (bid or offer), indicating to all respondents if they are requested to bid or offer on the list items ([0126]) (Claim 4);

The investor may set a plurality of parameters on the inquiry list, said parameters including the "bond settlement date" for all items on the list ([0116]) (Claim 5);

The default is provided for the bond settlement date and the user is allowed to overwrite the default to some other date ([0136]) (Claim 6);

The investor may set a plurality of parameters on the inquiry list, the parameters

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Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

including the benchmark settlement date for all benchmarks on the list (for items that are intended to be crossed) ([0116]) (Claim 7);

A default is provided for the benchmark settlement date and the user is allowed to overwrite the default to some other date ([0136]) (Claim 8);

The investor may set a plurality of parameters on the inquiry list, the parameters including the spot method under which any bonds that require spotting will be processed ([0142]) (Claim 9);

A default is provided for the spot process and the user is allowed to overwrite the default to some other date ([0142]) (Claim 10);

The investor may set a plurality of parameters on the inquiry list, said parameters including the dealers that will receive the list ([0103]) (Claim 11);

The initiator selects the names of the dealers from the dealer grid box ([0112]) (Claim 12);

The investor may set a plurality of parameters on the inquiry list, the parameters including whether or not to disclose to all respondents of the list, the total number of respondents who were sent the list ([0112]) (Claim 13);

The initiator can choose to select or unselect a "reveal number of dealers" checkbox ([0112]) (Claim 14);

The investor may set a plurality of parameters on the inquiry list, said parameters including textual remarks ([0107]) (Claim 15);

The textual remarks appear at all list respondents and do not affect any terms to the trade, but may act as clarifiers or other industry standard parlance ([0107]) (Claim 16);

The initiator sets a plurality of parameters on each item on the inquiry list comprising, for certain financial products defined by the system, selection of an underlying security as the benchmark instrument, and the financial instrument is quoted on a spread basis in relation to the selected benchmark instrument ([0113] and [0127]) (Claim 17);

After a spread is agreed, the selected benchmark instrument is used to price the financial product ([0113]) (Claim 18); and

The initiator sets a plurality of parameters on each item on the inquiry list comprising for certain financial instruments as defined by the system, selection of an underlying benchmark instrument and an indication if the financial instrument will be traded outright as a single transaction or crossed with the underlying benchmark (two transactions) ([0127] & [0147]) (Claim 19).

The Agarwal reference discloses a method implemented by a computer system for the trading, buying or selling, of lists of independent items at independent quantities between an initiator and multiple respondents, said method comprising:

Providing a list creation state to enable the initiator to enter, through a user interface, a list of items of buying or selling interest with select volumes ([0103]),

Providing a list response state to enable list-recipient respondents to enter, through a user interface, offers or bids on a single item, multiple items, or all items on the list, on an item-by-item basis at independent spreads, yields, discount margins or prices in the volumes requested ([0131]),

Providing a list trade state to enable the initiator to view and trade on (by hitting or lifting), through said user interface, on a single item, multiple items, or all items on the list, on an item-by-item basis at independent and select spreads, yields, discount margins or prices for each item where a response(s) was received ([0126]),

Providing a spotting state which occurs at the request of list initiator and uses a set of pre-defined algorithms to retrieve and if necessary calculate a benchmark spot price and present that price to the initiator ([0142]), and

Providing a list complete state to notify the initiator and respondents that each item on the list have reached a final state in which the item was traded or not traded ([0144]) (Claim 20);

Supports both bid and offer lists and allows the initiator to initiate a process, select a list of bonds for trading from a system provided reference database or from the initiator's own portfolios) without limitation as to whether or not such bond is in any system participant's inventory ([0103] & [01014]) (Claim 21);

The initiator submits a list directly to respondents on a named basis, with firm identifiers displayed on the initiator and respondent screens, and all trades settle directly without requiring a broker intermediary for settlement ([0014] & [0103]) (Claim 22);

The initiator must request the dealer legal entities for which they want to be approved to trade with and request the market segments and products for which they want to trade in, and

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Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Respondents must authorize a trading relationship for each initiator and initiator user ([0103] & [0121]) (Claim 23);

A database stores and manages information and for the instantaneous retrieval and enforcement of said trading relationships at the moment of bid or offer list creation ([0094] & [0951]) (Claim 24);

In the case that the list initiator executes a trade with the respondent with the best response, then

The second best response for each item is displayed:

To the list initiator on the same screen and along side the best response to each item on the list ([0129]),

To the best respondent of each list item after that list item has been hit or lifted ([0129]), and

The second best responder of each list item is notified as such after that list item has been hit or lifted ([0147]) (claim 25);

In the case that the list initiator executes a trade with a respondent other than the respondent with the best response, then

The best response is displayed to executing respondent of a list item after that list item has been hit or lifted ([0142]), and

The respondent with the best response is notified as such ([0142]) (Claim 26);

Which allows the initiator of a list to resubmit the list at any time after the list was originally submitted and which, anytime the resubmit function is selected for a given list, the inquiry list edit screen is automatically populated with all of the original information for all financial instruments that did not trade on the original list ([0142]) (Claim 27).,

The user interface enables pricing to be determined for each item on the inquiry list using a single display screen ([0124] & [0127]) (Claim 28);

The user interface automatically presents the best response to each item on the inquiry list on the single display screen ([0138]) (Claim 29);

The user interface enables the initiator to display any of the responses for any of the items on the inquiry list on the single display screen ([0138]) (Claim 30); and

A final price alert is sent to the initiator after a final price is determined ([0144]) (Claim 31).

Claims 1-31 meet the criteria set out in PCT Article 33(4) and thus have industrial applicability because the subject matter claimed can be made or used in industry.